

SYMBOL COMBINING METHOD FOR REDUCING THE NUMBER OF FIFO REGISTERS  
OF A FINGER, RAKE RECEIVER AND METHOD FOR DRIVING THE RAKE RECEIVER

ABSTRACT OF THE DISCLOSURE

A symbol combining method in a Rake receiver, which relates to a method for combining the demodulated multi-path signals in a demodulation process of a code division multiple access communication system. The symbol combining method, a Rake receiver using the symbol combining method and a method for driving the Rake receiver, remarkably reduce a hardware complexity of a FIFO register used to regulate a timing synchronization of each finger in Rake receiver by using a new algorithm in a combining process when a CDMA communication system combines a plurality of multi-path signals therebetween. Whereas a conventional combining algorithm uses an individual FIFO register every finger so as to adjust a timing synchronization of each symbol before combining a demodulated symbol, the inventive combining algorithm performs a symbol combining operation as well as a timing synchronization of a symbol at the same time, and performs a combining action by using only one FIFO register irrespective of the number of fingers.

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